

Title (en)  
PECVD method with modulation of power

Title (de)  
PECVD-Verfahren mit Leistungsmodulation

Title (fr)  
Méthode PECVD avec modulation de puissance

Publication  
**EP 1780304 A3 20091118 (EN)**

Application  
**EP 06022262 A 20061025**

Priority  
US 26459605 A 20051101

Abstract (en)  
[origin: EP1780304A2] A method of generating a film during a chemical vapor deposition process is disclosed. One embodiment includes generating a first electrical pulse having a first pulse amplitude; using the first electrical pulse to generate a first density of radicalized species; disassociating a feedstock gas using the radicalized species in the first density of radicalized species, thereby creating a first deposition material; depositing the first deposition material on a substrate; generating a second electrical pulse having a second pulse amplitude, wherein the second pulse amplitude is different from the first pulse width; using the second electrical pulse to generate a second density of radicalized species; disassociating a feedstock gas using the radicalized species in the second density of radicalized species, thereby creating a second deposition material; and depositing the second plurality of deposition materials on the first deposition material.

IPC 8 full level  
**C23C 16/515** (2006.01); **C23C 16/30** (2006.01); **H01J 37/32** (2006.01)

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**C23C 16/029** (2013.01 - EP US); **C23C 16/308** (2013.01 - EP US); **C23C 16/401** (2013.01 - EP US); **C23C 16/515** (2013.01 - EP US); **C23C 16/52** (2013.01 - EP US); **H01J 37/32201** (2013.01 - EP US)

Citation (search report)  
• [X] EP 1561840 A1 20050810 - TOYO SEIKAN KAISHA LTD [JP]  
• [X] US 2003143821 A1 20030731 - NIINO HIROAKI [JP], et al

Cited by  
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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

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DOCDB simple family (publication)  
**EP 1780304 A2 20070502**; **EP 1780304 A3 20091118**; CN 1958840 A 20070509; TW 200730662 A 20070816; TW I346147 B 20110801; US 2007098893 A1 20070503; US 2007098916 A1 20070503; US 7842355 B2 20101130

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**EP 06022262 A 20061025**; CN 200610143249 A 20061101; TW 95138238 A 20061017; US 26459605 A 20051101; US 49262806 A 20060725